

Migrates during the non-breeding season as far north as Northern Rhodesia, southern Nyasaland and northern Mocambique.

*Terpsiphone viridis violacea* (Grant and Mackworth-Praed)

*Tchitrea plumbeiceps violacea* Grant and Mackworth-Praed, 1940, *Bull. B.O.C.*, 60, p. 93: Fort Hill, northern Nyasaland.

The male of this race is characterised by having a slightly metallic blue head, a grey, non-metallic, throat and white under tail-coverts.

*Measurements*: 107♂♂ wing 76.0–88.5 (83.1) mm.

*Material*: 112+ (Southern Rhodesia 28, Northern Rhodesia 38, Bechuanaland Protectorate 1, Mocambique 9, Tanganyika Territory 4, Nyasaland 9, Transvaal 20 and South West Africa 3.)

*Range*: Southern and central Mocambique, northern and western Transvaal, Bechuanaland Protectorate, northern South West Africa and probably southern Angola, Southern Rhodesia, Nyasaland and eastern Northern Rhodesia east of the Muchinga Mtns. Migrates north during the non-breeding season, i.e. the southern winter months.

*Terpsiphone viridis plumbeiceps* Reichenow

*Terpsiphone plumbeiceps* Reichenow 1898, in Werther, *Die Mittleren Hochländer des nördlichen Deutsch-Ost-Afrika*, p. 275: Malanje, northern Angola.

The male of this race is very similar to that of *T. v. violacea*, the only constant difference between the two being the rufous under tail-coverts of *T. v. plumbeiceps* as opposed to the white under tail-coverts of *T. v. violacea*. The blue head of *T. v. plumbeiceps* appears to be even less metallic than that of *T. v. violacea*.

*Measurements*: 10♂♂ wing 79.0–88.0 (83.8) mm.

*Material*: 12 (Northern Rhodesia 8, Angola 4).

*Range*: Angola, Northern Rhodesia west of the Muchinga Mtns. and the south-eastern Congo. Migrates, presumably northwards, during the non-breeding season.

The races of *T. viridis* north of the three dealt with here have been examined, but inadequate material prevents discussion on them here.

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## Some breeding and other records from Madagascar

by C. W. BENSON AND CHARLES R. S. PITMAN

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The field notes in this paper were made by C. W. B., assisted by his wife and M. Paul Griveaud, during a stay at Tananarive from 13th to 25th

November, 1958 (see *Ibis*, 103b, 1960: 9-10). All specimens, including eggs, recorded are now in the British Museum unless otherwise indicated. The Institut de Recherches Scientifiques à Madagascar is abbreviated as I.R.S.M. The nomenclature followed is that of Rand (1936), unless otherwise indicated.

#### *Ardeola ralloides* (Scopoli)

On 23rd November a visit was paid to Imerimanjaka, seven miles south of Tananarive, where around an area of about six acres of papyrus swamp there were hundreds of individuals of this species. Hidden in the papyrus, at an average of about 1½ feet above water-level, several nests were found, flimsy platforms of reeds and sticks, of diameter about 9 inches, depth 3 inches. A C/1 fresh collected measures 38.5 x 28.2 mm., a C/2 fresh 37.1 x 26.8, 38.2 x 26.3 mm. All three eggs are pale blue, and were very nest-stained. A C/3 fresh was left at the I.R.S.M. Five young, out of their nests, were caught by hand, examined and then released. They had wings ranging from 61 to 175 mm., the smallest being still mainly in down. Rand (1936) records specimens in breeding condition from Vohemar in September, and from Lake Iotry in November and December.

Some fifty *Egretta ardesiaca* and one *Ardeola idae* (in breeding dress) were also seen in this swamp, but no evidence was obtained of their breeding.

#### *Fulica cristata* Gmelin

A C/4 almost fresh was collected on Lake Mandrosesa, on the outskirts of Tananarive, on 22nd November. The eggs are typical, three being finely, but not thickly, spotted and speckled all over, with purplish brown and chocolate on a rich buff ground, while the fourth is pale creamy stone, and paler and more finely marked than the other three; size 53.0 x 37.0, 52.1 x 36.0, 48.6 x 36.2, 51.2 x 35.0 mm. A pair of adults was seen on the edge of the papyrus swamp at Imerimanjaka, on 23rd November. They were accompanied by a young bird not more than a quarter of their size.

#### *Chlidonias hybrida sclateri* Mathews & Iredale

On 22nd November, on Mandrosesa, there were at least one hundred individuals in breeding dress, three of which were collected. They were around scattered nests (not in a compact colony), shallow platforms of reeds, near the edge of the lake. The egg from a C/1 fresh collected is light greenish tinged brownish, with large blotches of sepia around the large end, but elsewhere superficial markings sparse, on underlying small spots of dull and light grey; size 39.5 x 26.5 mm. Two from a C/3 (the third egg was lost) are light stone-brown tinged greenish, boldly spotted all over with dark brown on underlying dark grey; size 37.2 x 27.2, 37.7 x 27.0 mm. Several other C/3 and a C/2 hatching, were seen. Chicks were also noted; some of which were just able to fly short distances. The stomach-contents of one collected were frogs, as were those of three adults. The foregoing supplements the comprehensive account by Milon (1949).

#### *Centropus toulou toulou* Müller

Noticed in papyrus at Tananarive, in evergreen forest at Périnet, 60

miles east of Tananarive. C. W. B. agrees with van Someren (1947) that the bubbling call is very similar to that of *C. superciliosus* (and *C. senegalensis*, in Northern Rhodesia and Nyasaland). Other calls were a higher pitched variant of the bubbling, and "pop-pop-pop-pop-pop, kik-ik-ik-ik-ik-ik-ik-ik," both quite distinct from the call of any *Centropus* in Northern Rhodesia or Nyasaland.

*Eurystomus glaucurus glaucurus* (Müller)

A female was collected at Périnet, on 16th November. It contained a fully developed egg, smooth and white, size 36.2 x 28.6 mm.

The call of this form was recorded as a low rapid, buzzing "dza-dza-dza", this triplet being repeated about six times. The first "dza" in each triplet was more emphatic than the next two. It was quite unlike the hoarse, screechy notes of the breeding forms of this species in Abyssinia or Nyasaland (Benson, 1948). For other renderings of the call, see Rand (1936) and van Someren (1947). The local name at Périnet was 'gadragadra', certainly an onomatope.

*Caprimulgus madagascariensis madagascariensis* Sganzin

A male, now in the I.R.S.M., both testes measuring 5 x 3 mm., was collected in an Eucalyptus plantation, on the outskirts of Tananarive, on 23rd November. The call, also heard in a similar habitat near Périnet, sounded exactly like "tink, t-r-r-r", no doubt the same as the "ta tarrraa" rendering by Rand (1936), and quite unlike that of any species heard in Northern Rhodesia, Nyasaland or southern Abyssinia.

*Caprimulgus enarratus* Gray

A chick was caught by hand at Périnet in evergreen forest on 15th November, together with its male parent, apparently shortly to breed again, as it had right testis 7 x 5, left 8 x 7 mm.

The chick, for a description of which we have to thank Mrs. B. P. Hall, is still mainly in downy plumage, wing only 95 mm., tail 40 mm. Above it is pale buffy brown very lightly and irregularly barred with blackish. On the lower back there are some more solid black markings on a more rufous background, giving a blotchy effect similar to that found in adults, but the outlines less well defined. Below, the throat is only sparsely covered in down, the breast is pale buffy brown fading to grey on the lower breast and abdomen, the whole with obsolescent grey barring. The wings and tail are in pin-feather, and there are a number such on the head, but very few on the body.

*Motacilla flaviventris* Hartlaub

A nest containing two young almost fledged, similar to adults in colour, was seen in a monkey-puzzle tree, ten feet above the ground, outside the I.R.S.M. buildings in Tananarive, on 24th November.

*Cisticola cherina* (Smith)

A C/2 fresh was collected near Périnet on 16th November. The eggs agree generally with the description by Rand (1936).

*Ploceus nelicourvi* (Scopoli)

Four nests were seen over a pool in evergreen forest at Périnet, 16th November. They were all within a few yards of each other, but grouped into pairs, those of each pair being less than two feet from each other. One nest contained two well feathered nestlings, and two infertile eggs, plain light blue without gloss, both measuring 20.0 x 15.0 mm. The generic name is in accordance with Moreau (*Ibis*, 1960: 299).

In addition, at Périnet on 15th/16th November, the following specimens, in or very close to full breeding condition, were collected:— *Newtonia brunneicauda* (2♂), *Tchitrea mutata* (♂), *Copsychus albospecularis* (2♂, ♀), *Neomixis striatigula* (♂), *Ixocincla madagascariensis* (♂), *Leptopterus chabert* (♂), *Calicalicus madagascariensis* (2♂, ♀), *Zosterops maderaspatana* (♂), *Spermestes nana* (♂, ♀). These specimens were shared between the British Museum and the I.R.S.M.

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**More Snake and Lizard Predators of Birds**

by CHARLES R. S. PITMAN

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These notes are to a great extent concerned with Africa; *ibid* 78<sup>(5)</sup> <sup>(6)</sup> <sup>(7)</sup>. Much of the information has been acquired in the course of correspondence.

## PART I

## SNAKES

## (i) Arboreal

(a) *Dispholidus typus* (A. Smith), Boomslang.

AFRICA: NYASALAND. Mr. R. C. H. Sweeney (Dept. of Agriculture), in his open-air vivarium with a *Cassia* tree in the centre, has seen captive boomslangs holding in the mouth respectively one *Lagonosticta* sp., one *Uraeginthus angolensis* (L.) and one *Pycnonotus xanthopygos* (Hemprich and Ehrenberg), which they had caught. Many birds landed in this *Cassia* and it is probable that others were eaten. Though pigeons and doves landed in other *Cassia* trees in the garden, what was noticeable none came to the tree in the vivarium evidently having detected the resident snakes.

Also, Sweeney (1957) shot a ♀ *D. typus* near the entrance to a nest hole in a large breeding colony of some 200 White-fronted Bee-eaters, *Melittophagus bullockoides* (A. Smith) in a river bank some 15 feet above the water level. The snake contained three undeveloped nestlings. The reptile was near the top of the bank and was being vigorously assailed by the bee-eaters which were circling and swooping down towards it.

NORTHERN RHODESIA. Mr. J. E. Newby has fed small fowls' eggs